

SECTION 12690 - FLOOR MATS AND FRAMES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes the following:
 - 1. Frames to be set in concrete floors to receive recessed floor mats.
 - 2. Recessed floor mats of the following type:
 - a. Roll-up linked-tread-type floor mats.
- B. Related Sections: The following Sections contain requirements that relate to this Section:
 - 1. Division 3 Sections for concrete work, including forming, placing, and finishing concrete floor slabs and grouting frames into recess.

1.3 SUBMITTALS

- A. General: Submit the following according to the Conditions of the Contract and Division 1 Specification Sections.
- B. Product data for each type of floor mat and frame specified, including manufacturer's specifications and installation instructions, details of construction relative to materials, dimensions of individual components, profiles, and finishes.
 - 1. Coordinate shop drawing submittal with concrete work shop drawings showing oversized recess for deferred installation of frames.



- C. Samples for initial selection purposes in form of manufacturer's color charts consisting of actual sections of floor mat and frame materials, showing full range of colors, textures, finishes, and patterns available, for each type of floor mat and frame indicated.
- D. Samples for verification purposes in form of 12-inch- (300 mm) square assembled section of floor mat and frame members with selected tread surface showing each type of metal finish and color of exposed floor mat, frames, and accessories required. Where finishes involve normal color and texture variations, include sample sets showing the full range of variations expected.
- E. Maintenance data in the form of manufacturer's printed instructions for cleaning and maintaining floor mats.

1.4 PROJECT CONDITIONS

- A. Field Measurements: Check actual blocked-out openings in floors by accurate field measurements before fabricating frames and mats; show recorded measurements on final shop drawings. Coordinate fabrication schedule with construction progress to avoid a delay of the Work.

1.5 QUALITY ASSURANCE

- A. Single-Source Responsibility: Obtain floor mats and frames from one source of a single manufacturer.

1.6 SEQUENCING AND SCHEDULING

- A. Provide oversized recesses in concrete work to receive frames. Defer frame installation until building enclosure is complete and related interior finish work is in progress.
 - 1. Locate, align, and level frame members accurately. Recess in-fill concrete where required for placement of concrete topping.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated in the Work include, but are not limited to, the following:
1. Roll-Up Linked-Tread Floor Mats:
 - a. Arden Architectural Specialties, Inc.
 - b. Balco, Inc.
 - c. Construction Specialties, Inc.
 - d. K.N. Crowder Mfg. Inc.
 - e. J.L. Industries.
 - f. Pawling Corp.
 - g. Reese Enterprises, Inc.

2.2 MATERIALS

- A. General: Provide colors, patterns, and profiles of materials, including metals and metal finishes indicated or specified. Where not indicated, provide colors, patterns, and profiles selected from manufacturer's standards.
1. Provide mats with custom inlaid or woven-in graphic (design, logo, emblem, characters, or other graphic).
- B. Recessed Mat Frames: Size and style to fit floor mat type matching approved sample, for permanent recessed installation in floor, complete with corner pins or reinforcing and installation anchorage.
1. Extruded Aluminum: ASTM B 221, alloy 6063-T5. Coat surface of frame that will contact cementitious material with zinc chromate paint or manufacturer's standard protective coating.
 2. Provide edge members in single lengths or, where frame dimensions exceed maximum available lengths, provide minimum number of pieces

possible, with hairline joints equally spaced and with pieces spliced together by means of straight connecting pins.

- C. Roll-Up Aluminum Linked-Tread Floor Mats: Extruded aluminum tread-slats with continuous vinyl cushions on bottom surface of slats with 2-inch- (50 mm) wide by 3/8-inch- (10 mm) thick hinged slat modules. Provide type of hinge, aluminum finish, and tread inserts specified below.
1. Hinge: Low-density polyethylene (LDPE).
 2. Aluminum Finish: Color anodized finish, as selected.
 3. Tread Surface: Fusion-bonded carpet insert of 1/4-inch- (6 mm-) high, 35 oz. per sq. yd. (950 g/m²) level-cut, class 1 fire-rated, woven nylon filament. Color as selected.

2.3 FABRICATION

- A. Shop-fabricate units of floor mat work to greatest extent possible in sizes as indicated. Where not indicated otherwise, provide single unit for each mat installation, but do not exceed manufacturer's maximum size recommendation for units intended for removal and cleaning. Where joints in mats are necessary, space symmetrically and away from normal traffic lanes. Miter corner joints in framing elements with hairline joints or provide prefabricated corner units without joints. Where possible, verify sizes by field measurement before shop fabrication.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Install recessed frames and mats complying with manufacturer's instructions. Set mat tops at height recommended by manufacturer for most effective cleaning action; coordinate top of mat surfaces with bottom of doors that swing across mats to provide clearance between door and mat. Coordinate top of mat with finish flooring.

3.2 PROTECTION

- A. After completing frame installation and concrete work, provide temporary filler of plywood or fiberboard in recesses, and cover frames with plywood protective flooring. Maintain protection until construction traffic has ended and Project is near time of Substantial Completion.
- B. Defer installation of floor mats until time of Substantial Completion for Project.

END OF SECTION 12690

